

MEEEN 1210: MEE Practice II

Spring 2008

Thursdays 4 - 4:50pm

UNTRP 185

Dr. Matthew J. Traum

January 17, 2008

First Class Meeting Agenda

1. Course Entry Survey (15 min.)
2. Announcements (5 min.)
3. Syllabus Review & Web Site (10 min.)
4. Introduction to Course Project (10 min.)
5. Introductory Ethics Lecture (10 min.)

Study Consent Form & Course Entry Survey

Students may read, understand, and sign the consent form and complete the course entry survey. Both documents are voluntary.

The survey provides data on the effectiveness and relevance of the teaching methods and topics in the course. The consent form allows Dr. Traum to publicly release this data as part of an ongoing study of practice in the engineering curriculum.

Announcements:

Undergraduate Research Experiences

An organization called the Researcher Incubator was created in Fall 2007 to train undergraduates how to perform research.

All undergraduate engineering students are invited to join a project team.

The first research lab meeting will be Friday, Jan. 18 from 11am – 12pm in UNTRP B140.

Announcements:

Dr. Traum's Office Hours

Office hours for MEEN 1210 will be every Tuesday from 4 – 5pm in UNTRP F101E.

Dr. Traum is lonely. Please visit him!

Syllabus Review and Web Site Use

Hard copies of the syllabus and first homework assignment were handed out.

Students should read the syllabus after class and e-mail questions to Dr. Traum.

7 HW assignments total (70% of grade):

1 introductory quantitative

3 quantitative (based on faculty lectures)

3 written (based on industry lectures)

Syllabus Review and Web Site Use

All subsequent HW assignments can be downloaded from the course Web site.

Web site also includes schedule of speakers and presentation slides (when available).

<http://www.mee.unt.edu/public/Traum/courses/2008spring/meen1210/>

Course Project

25% of course grade: **due April 3, 2008**

NSPE 2008 Milton F. Lunch Ethics Contest

Hard copies of the contest instructions, problem statement, and the NSPE Code of Ethics for Engineers were handed out.

After class, students must self-organize into project groups of about 4 and elect one member to e-mail Dr. Traum all members' names.

Course Project

Voluntary Midterm Project Reviews

A project review forum will occur on March 13, 2008 from 6pm to 8pm in UNTRP B185.

Each team will spend 4 minutes presenting one slide outlining the team's approach.

Each participating team will receive written feedback from their peers with suggestions to improve the final ethical analysis.

Introduction to **Professional Ethics for** **Engineers**

Dr. Matthew J. Traum

Assistant Professor, MEE Department

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Chapter 1

Engineering Ethics:
Making a Difference

Definition of a “Profession”

1. Requires extensive training of a theoretical and intellectual nature
2. Knowledge and skills are critical to society’s well-being
3. Exercise a near monopoly on provision of professional services in an area of specialization
4. Enjoy an unusual degree of autonomy in the workplace
5. Claim to be self-regulated by a code of ethics

What is the Definition of “Ethics”?

1. A system of moral principles: the ethics of a culture.
2. The rules of conduct recognized in respect to a particular class of human actions or a particular group, culture, etc.: medical ethics; Christian ethics.
3. Moral principles, as of an individual: His ethics forbade betrayal of a confidence.
4. That branch of philosophy dealing with values relating to human conduct, with respect to the rightness and wrongness of certain actions and to the goodness and badness of the motives and ends of such actions.

<http://www.dictionary.com> (last accessed 10/16/2007)

What is a “Code of Ethics”?

1. Professional ethics, not personal ethics or common morality
2. Furnishes agreed-upon standards for professional conduct
3. Enables professionals to act faithfully for a client or for society; but contrary to personal ethics and common morality without retribution
4. Usually administered by a professional organization (NSPE for engineers)
5. Provides focus for discourse on (ever-changing) obligations of professionals

What a “Code of Ethics” is Not

A code of ethics is not a prescriptive solution providing the correct outcome to every ethical problem.

The discussion of situations where our code of ethics is uncertain or silent on an issue is the most interesting and enlightening aspect.

Chapter 2

Responsibility in Engineering

Concepts of Responsibility

Obligation Responsibility:

Professionals must use specialized skills to benefit clients and the public without violating trust, i.e., “to act responsibly”.

Blame Responsibility: Identify to whom blame is attributed for wrongdoing, i.e., “who is responsible for the accident?”

Role Responsibility: Identifies people in supreme supervisory roles, i.e., “the group’s final product is the responsibility of its leader.”

Impediments to Ethical Judgment

Examples of attitudes and mindsets contributing to irresponsible actions:

*Self-interest, Fear, Self-deception
Ignorance, Egocentric
Tendencies, Microscopic Vision,
Uncritical Acceptance of Authority,
and “Groupthink”*

MEEN 1210 Reading Assignment

For next week, read Chapters 1 and 2 in Engineering Ethics: Concepts & Cases by Harris, Pritchard, and Rabins.

